AMENDMENTS TO THE CLAIMS

Please amend claims 15, 16 and 24 as set forth below. No claim is added or canceled herein.

- 1-14. (Canceled)
- 15. (Currently amended): An interactive seamer <u>apparatus</u> for <u>seaming two or more single</u> view images vertically or horizontally into panoramic images, comprising:
 - a user interface having a first display area for displaying a panoramic image and a second display area for displaying the two or more single view images projected from the panoramic image, the two or more single view images having overlapping portions at least partially encompassed by at least one outlined area, each pixel in the overlapping portions encompassed by the outlined area having an opacity value that is determined by the location of the pixel in the outlined area and a predetermined opacity curve; and an image seamer for seaming the two or more single view images into the panoramic image, wherein the opacity values of the pixels in the overlapping portions encompassed by the outlined area ean be are manually adjusted by changing
- 16. (Currently amended): An interactive seamer <u>apparatus</u> for <u>seaming two or more single</u> <u>view images vertically or horizontally into panoramic images</u>, comprising:

the size of the outlined area in the second display area.

a user interface having a first display area for displaying a panoramic image generated from a number of single view images and a second display area for displaying a selected single view image projected from the panoramic image, wherein an array of control points are superimposed-on within an area in the panoramic image corresponding to an interior of the selected single view

image for manually inducing changes in warping parts of the panoramic image corresponding to the selected single view image by moving the control points, the warping, the manually induced changes being independent of placement or movement of the selected single view image within the panoramic image; and

an image seamer for seaming the selected single view image into the panoramic image based on user specified parameters.

- 17. (Previously presented): The interactive seamer of claim 16, wherein at least one parameter adjusts the focal length of the selected portion of the panoramic image.
- 18. (Previously presented): The interactive seamer of claim 16, wherein the user interface includes a third display area for displaying values of parameters.
- 19. (Previously presented): The interactive seamer of claim 16, wherein at least one parameter provides high resolution zoom to enable a user to examine artifacts without requiring a high resolution representation of the entire panoramic image.
- 20. (Previously presented): The interactive seamer of claim 16, wherein at least one parameter specifies an artificial horizon in the panoramic image.
- 21. (Previously presented): The interactive seamer of claim 16, wherein at least one parameter specifies the lay down order of multiple single view images seamed together to form the panoramic image.
- 22. (Previously presented): The interactive seamer of claim 16, wherein the user interface includes multiple view windows for simultaneously showing a perspectively correct view of the selected single view image and a changed view of the single view image.

- 23. (Previously presented): The interactive seamer of claim 16, wherein the selected single view image with manually induced changes is capable or being repositioned within the panoramic image without disturbing the manually induced changes.
- 24. (Currently amended): A <u>computer-implemented</u> method of interactively seaming single view images <u>vertically</u> or <u>horizontally</u> into a panoramic image, comprising:

displaying a panoramic image in a first display area of a user interface;

displaying two or more single view images projected from the panoramic image in a second display area of the user interface, the two or more single view images having overlapping portions at least partially encompassed by at least one outlined area, each pixel in the overlapping portions encompassed by the outlined area having an opacity value that is determined by the location of the pixel in the outlined area and a predetermined opacity curve; and

seaming the two or more single view images into the panoramic image, wherein the opacity values of the pixels in the overlapping portions encompassed by the outlined area can be manually adjusted by changing the size of the outlined area in the second display area; and

storing the panoramic image.